What Is Claimed Is:

1. In wire processing apparatus having a cutter for effecting cuts through each of a plurality of covering layers on a central, elongated, filamentary member, and means for electronically storing a plurality of values corresponding to the length from a terminal end of said member to the position of each of said cuts, the improvement comprising novel means for manually adjusting and mechanically storing a plurality of values corresponding to the depth of each of said cuts, said improvement comprising:

a) a housing having wall means defining an enclosed space;

b) a plurality of individual elements movable to respective positions each corresponding to the depth of one of said cuts;

c) mover for sequentially moving said individual elements to engage and move said cutter to effect said depth of one of said cuts in response to movement of said individual elements to each of said respective positions; and

d) an opening in said wall means providing manual access to said enclosed space for movement of said individual elements to selectively adjust said respective positions.

2. The improvement of claim 1 wherein said wall means include an upper wall wherein said opening is located for downward manual access to said enclosed space.

3. The improvement of claim 1 wherein said individual elements are shafts having respective, parallel longitudinal axes equally spaced radially from and parallel to a central axis, said individual elements being movable to said respective positions in directions parallel to said longitudinal axes.

4. The improvement of claim 3 wherein said shafts are threaded and further including a plurality of nuts threadedly engaged with respective ones of said shafts to effect axial movement of said shafts in response to rotation of said nuts.

5. The improvement of claim 4 and further including a turret upon which said shafts and nuts are mounted, said turret being rotatable about said central axis to sequentially place said longitudinal axes in position to engage and move said cutter.

6. The improvement of claim 5 and further including a drive for moving said turret in a direction parallel to said central axis between predetermined, fixed, forward and rear positions.

7. The improvement of claim 6 wherein said mover said turret comprise a stepper

motor and an indexer for indexing said stepper motor a fixed number of steps in each direction to effect said movement between said forward and rear positions.

8. The improvement of claim 1 wherein said apparatus includes a drive for moving said individual elements linearly between predetermined, fixed, forward and rear positions to engage and move said cutter.

9. The improvement of claim 8 wherein said drive for moving said individual elements between said forward and rear positions is a stepper motor.

10. The improvement of claim 1 wherein said apparatus includes an electronic storage for means for electronically storing a plurality of values corresponding to respective lengths from said terminal end to each of said cuts.

11. Wire processing apparatus comprising:

a) fixed frame;

b) wire grippers mounted upon said frame;

c) a stepper motor actuable to move said gripper between a fixed, first position, spaced from said wire, and a variable second position, forcibly engaging and fixing the position of said wire;

d) indexer for indexing said stepper motor a number of steps defining the distance of movement of said gripper from said first to said second position; and

e) selector for selectively varying said number of steps, thereby varying said distance of movement from said first to said second position and the force exerted by said gripper on said wire in said second position of said gripper.

12. The apparatus of claim 11 wherein said indexer comprise an electronic memory and said selector comprise an input interface for selectively entering values into said memory commensurate with said number of steps.

13. The apparatus of claim 12 wherein said gripper comprise a pair of gripper members mounted for pivotal movement between said first and second positions.

14. The apparatus of claim 13 and further including a wedge member movable linearly by said stepper motor to move said gripper members between said first and second positions.

15. The apparatus of claim 12 and further including a pair of rods having parallel, longitudinal axes mounted upon said frame for rotation about said axes in response to actuation of said stepper motor.

16. The apparatus of claim 15 wherein said gripper comprise a pair of gripper members fixedly attached to respective ones of said rods for rotation therewith.

17. The apparatus of claim 16 and further including a wedge member and a frame member upon which both said stepper motor and said wedge member are mounted.

18. The apparatus of claim 17 and further including a lead screw axially and rotationally fixed with respect to said fixed frame and threadedly engaged with said stepper motor for linear movement of said frame member, and thereby said stepper motor and wedge member, in response to actuation of said stepper motor.

19. The apparatus of claim 18 wherein said frame member is mounted upon at least one of said rods for sliding movement thereon.

20. Wire processing apparatus for performing a plurality of sequential steps of each of first and second processing operations on first and second wire ends, respectively, said apparatus comprising:

a) gripper for releasably engaging and fixing the position of a wire;

b) cutter for performing said processing operations;

c) drive for effecting sequential movements of said cutter to perform said sequential steps;

d) electronic memory for actuating said drive to effect said sequential steps in accordance with values stored in said memory;

e) input interface for selectively entering first and second pluralities of values, commensurate with said sequential steps of said first and second processing operations, respectively, into said memory; and

f) controller for said memory to actuate said drive to perform said first and second processing operations alternately upon successive actuation's.

21. The apparatus of claim 20 and further including manually operable actuators for initiating said processing operations.

22. The apparatus of claim 20 wherein said input interface include a keypad.

23. The apparatus of claim 22 wherein said keypad includes a pictorial representation of a wire having opposite, terminal ends and indicia relating one of said ends to said sequential steps of said first processing operation and the other of said ends to said sequential steps of said second processing operation.

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24. In wire processing apparatus having cutting means for effecting cuts through each of a plurality of covering layers on a central, elongated, filamentary member, the improvement comprising novel means for adjusting and mechanically storing a plurality of values corresponding to the depth of each of said cuts, said improvement containing:

b) a plurality of individual elements or individual stop surfaces of a single element movable to respective positions each corresponding to the depth of one of said cuts;

c) means for sequentially moving said individual elements or stop surfaces to engage and move said cutting means to effect said depth of one of said cuts in response to movement of said individual elements to each of said respective positions; and drive to propel said sequentially moving.

25. Apparatus of claim 24 further containing means for mechanically or electronically storing a plurality of values corresponding to the length from a terminal end of said member to the position of each of said cuts.

26. Apparatus of claim 24 or 25, wherein the means for adjusting and mechanically storing contain means for manually adjusting the elements with respect to different cutting depths.

27. Apparatus of claim 24 or 25 , wherein the means for adjusting and mechanically storing contain a remote controllable drive for adjusting said elements.

28. Apparatus of any of claims 24-27, further containing a housing having wall means defining an enclosed space.

29. Apparatus of claim 28, further containing an opening in said wall means providing manual access to said enclosed space for movement of said individual elements to selectively adjust said respective positions.

30. Apparatus of claim 28 or 29, wherein said wall means include an upper wall wherein said opening is located for downward manual access to said enclosed space.

31. Apparatus of any of claims 24-30, wherein said individual elements are shafts having respective, parallel longitudinal axes spaced from and at least approximately parallel to a central axis, said individual elements being movable to said respective positions in directions parallel to said longitudinal axes.

32. Apparatus of any of claims 24-30, wherein said individual elements contain at least two stop surfaces or an unlimited number of stop surfaces defined by a curve (cam control device).

33. Apparatus of any of claims 24-30, wherein said individual elements contain a wedge, especially a wedge with a stair like stop surface.

34. Apparatus of any of claims 24-30, wherein said individual elements contain a plurality of alternatively selectable or unselectable, fix positioned stop elements for controlling the cutting depth, whereby the cutting means have co-operators for co-operation width said stop elements to limit and control the cutting depth.

35. Apparatus of claim 34 wherein said stop elements or said co-operators are electrical switches for controlling electrical drives which propel the cutter, said electrical drives substituting the mover for subsequently moving said individual elements c).

36. Apparatus of any of claims 24-30, wherein said individual elements contain at least one position sensor for detecting the actual position axial and/or radial position of the cutting means in relation to the axis of a cable.

37. Apparatus of claim 24, wherein the elements are exchangeable from a group of different elements.

38. Apparatus from claim 37, wherein at least some of said elements are mounted on an exchangeable element holder , said element holder preferably being in one piece (einstückig) with said elements.

39. Apparatus of any of claims 24-38, wherein at least one element is positionable by a motor, by pneumatic or by an electromagnet.

40. Wire stripping apparatus containing a blade and a wire clamp;
said clamp and blade may be moved relatively towards and away from each other during the time when a wire is clamped,
further containing a drive for moving the blade radially with respect to the wire and away from the wire; characterised in that between the blade and the drive or parallel to the blade and the drive a mechanical depth information storage with at least two different stored depths is provided and propelled by the same or a different drive when the cutting depth of the blade is set.

41. Apparatus of claim 40, wherein the storage contains individually adjustable storing elements which may be adjusted manually or by a drive.

42. Apparatus of claims 40 or 41, wherein the storage or the storing elements may be remote controlled by a mechanical or electrical remote control or a drive remote control.

43. Apparatus of any of claims 40 – 42, wherein the storage or the storing elements contain a scale or readout for adjusting and/or displaying the stored values.

44. Cable stripper apparatus with a storage for storing and providing cable stripping length information and a second storage for storing and providing cable stripping depth information ,

characterised in that at least one of said storage's contains mechanical stored information.

45. Apparatus of claim 44, wherein the storage for the stripping depth information is mechanical, electrical or a combination of electrical and mechanical and the storage for the stripping length is electronical.

46. Apparatus of claim 44 or 45 wherein the mechanical storage contains exchangeable storage devices and/or wherein the mechanical storage contains individual settable elements representing the stored information.

47. Apparatus of any of claims 1-46, wherein at least the depth information storage and any connected system is adapted to - at least relatively – measure the cutting depths on a gauge or on a prestripped cable functioning as a gauge.

48. Apparatus of claim 47, wherein the measured value can be directly stored in the storage and used as control values.

49. Apparatus of any of the preceding claims, wherein at least in one of the drives the torque or power consumption is measured – preferably wherein the power consumption is measured to calculate the torque output – and wherein a signal representative for said torque is displayed on a readout or sent to an interface or used to control said at least one drive.

50. Cable stripping apparatus with a cutter adapted to sequentially strip a cable in subsequent following steps, characterised in that a mechanical storing device with at least two storage sites is provided for at least two different parameters of the same kind to be stored in said storage's, wherein said stored parameters are – during stripping process - subsequently used for controlling said cutter during two different steps of stripping said cable and wherein an electric or pneumatic control is provided for to control said cutter and/or said storing device.

51. Cable stripping apparatus with a cable clamping mechanism containing a clamp with the possibility to control the clamping pressure, especially according to any of the preceding claims characterised in that the clamp is subsequently controllable by two

control members, wherein said control members are interconnected by a spring element and wherein one of said control members is directly driven by a control drive, and wherein said second of said control members is driven via said spring element from said first of said control elements.

52. Apparatus of claim 51, wherein both of said control members have at least one wedge- or curve like surface which co-operates – when in engagement - with a control lever which is connected with said clamp so that advancing said first of said control elements closes said clamp to a certain extent and so that after further advancing said first of said control elements advances said second control element into engagement with said control lever and thereby continues to further close said clamp or increases said clamping force of said clamp.

53. Apparatus of any of the preceeding claims wherein all storing elements are mechanical - preferably of the same structure as disclosed in WO-A-99/34493 of the applicant.

54. Apparatus of claim 20, wherein said memory is an electronic memory.

55. Apparatus of claim 20 and further including a pedal or remote operable actuator.

56. In wire processing apparatus having a cutter for effecting cuts through each of a plurality of covering layers on a central, elongated, filamentary member, the improvement containing:

a novel adjuster for and a mechanical storage for storing a plurality of values corresponding to the depth of each of said cuts and

b) at least two elements within said storage , said elements being moveable to respective positions each corresponding to the depth of one of said cuts;

c) mover for sequentially moving said elements to engage and move said cutter to effect said depth of one of said cuts in response to movement of said elements to each of said respective positions; and

at least one drive to propel said sequentially moving.

57. Apparatus of claim 56, wherein said mover for moving said elements contains a stepper drive and an indexer for indexing said stepper drive a number of steps in each direction to effect a movement between a forward and a rear position of said stepper drive.

58. Apparatus of claim 56 wherein said elements are threaded shafts having respective, parallel longitudinal axes spaced from and at least approximately parallel to a central axis, said elements being moveable to said respective positions in directions parallel to said longitudinal axis and wherein said shafts include at least one nut each threadedly engaged with it to effect axial movement of said shafts in response to rotation of said nuts.

59. Apparatus of claim 58, wherein said shafts and nuts are mounted on a turret which is rotatable about said central axis to sequentially place said longitudinal axes in position to engage and move said cutter.

60. Apparatus of claim 59, wherein said turret is rotatable – preferably by a drive - and/or wherein said turret is moveable in a direction parallel to said central axis between predetermined fixed forward and rear positions – preferably also by a drive.

61. Apparatus of claim 56, wherein said apparatus includes a drive – preferably a stepper motor - for moving said elements linearly between predetermined, fixed, forward and rear positions to engage and move said cutter.

62. Apparatus of any of the claims 56-61, wherein said apparatus includes an electronic storage for electronically storing a plurality of values corresponding to respective lengths from said terminal end to each of said cuts.

63. Wire processing apparatus according to any proceeding claim containing:

a) frame;

b) wire gripper mounted upon said frame;

c) motor actuable to move said gripper between a fixed first position, spaced from said wire and a variable second position, forcibly engaging and fixing the position of said wire;

d) an indexer for indexing said motor a number of steps defining the distance of movement of said gripper from said first to said second position; and

e) selector for selectively varying said number of steps, thereby varying said distance of movement from said first to said second position and the force exerted by said gripper on said wire in said second position of said gripper.

64. Apparatus of claim 63, wherein said indexer comprise an electronic memory and said selector comprise an input interface for selectively entering values into said memory commensurate with said number of steps.

65. Apparatus of claim 64, wherein said gripper contains a pair of gripper members mounted for pivotal movement between said first and second positions.

66. Wire processing apparatus for performing a plurality of sequential steps of each of first and second processing operations on first and second wire ends, respectively, said apparatus containing:

a) gripper for releasably engaging and fixing the position of a wire;

b) cutter for performing said processing operations;

c) drive for effecting sequential movements of said cutting means to perform said sequential steps;

d) memory for actuating said drive to effect said sequential steps in accordance with values stored in said memory;

e) input interface for selectively entering first and second pluralities of values, commensurate with said sequential steps of said first and second processing operations, respectively, into said memory and

f) controller for said memory to actuate said drive to perform said first and second processing operations alternately upon successive actuation's for both of said cable ends.

67. Apparatus of claim 66, further including manually operable actuator for initiating said processing operations.

68. Apparatus of claim 66, wherein said input interface include a keypad, preferably with a pictorial representation of a wire having opposite terminal ends.

69. Method to set the cutting depths of a blade of a cable stripping apparatus with a storage for storing cutting depth information, characterised in that a gauge or a prestripped respective cable is inserted into the stripping area of said apparatus; the blades of the cutter are closed as far as the gauge or prestripped cable allows for the first cut; the respective depth of the blades is stored in an electronic or mechanical storage and via a keypad a signal is given to a main control signalising which of one of possible cutting steps this depth refers to; the same process is done for any further stripping step until all depths relating to all stripping steps are inserted and stored.

70. Cable stripping apparatus with a mechanical storing device for storing stripping depth and/or stripping length information, characterised in that said mechanical storing device is put into respective positions for defining the respective length or depth information by an electrically controlled drive.

71. Apparatus of claim 70, wherein said drive is a stepper motor.

72. Apparatus of claim 6, 7, 57 or 71, wherein said drive or said stepper motor

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may be controlled electronically to allow a variable speed of axial movement and/or intermediate stops between said fixed forward and rear position of said turret or for defining the respective length or depth information.

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